## **ABSTRACT**

A computer to permit programming by active objects in multi-task mode, representative of systems for simulation, includes a device for real world simulation. The device includes an object simulation program for combined evolution of at least some of the active objects, including i) objects of state each containing at least one item of spatial and/or temporal and/or property data defining a current state, ii) interaction objects each containing the definition of at least one of the state objects and at least one function applicable to at least one of the state objects and defining at each point in time the simulated system topology, and iii) a simulation manager operable by sequences on a selection of interaction objects and to activate each interaction object only once for each sequence, according to an order varying in an at least partially random manner from one sequence to the other such as to apply each of the functions thereof to the actual state of each state object designated thereby for the evolution of the state thereof towards a new state.